LED Codes

Startup Codes

Battery level indication at startup.......

100% 75% 50% Dead

Transmitter off or not bound to the quad ...

Bind mode ....

Compass calibration needed..............

Emergency mode
(cycle power to reinitialize).................

Flying Codes

Low battery warning 1 (10.9V),
every 3 seconds

Low battery warning 2 (10.6V),
continuous, rapid flashing

⚠ **CAUTION:** If you see the LED signal for low battery (10.6V), immediately land your aircraft and recharge the battery.

⚠ **CAUTION:** Do not attempt to use Return Home with a low battery.

Return Home

Return to home mode active (solid red)

Return to home mode active, loss of GPS (rapid flash for 2 seconds, then once every second)

Follow-Me Mode (ST-10+ only)

Entering Follow-Me mode (GPS acquired)

Normal operation with GPS lock (all solid)
Camera tracking with GPS lock (all solid)

Loss of GPS (rapid flash for 2 seconds, then once every second)

GPS lock is required on both the quadcopter and the ST-10+ transmitter for Follow Me Mode to function.

Smart Mode

Entering Smart mode (GPS acquired)

Normal operation with GPS lock (all solid)

Loss of GPS (rapid flash for 2 seconds, then once every second)

AP Mode

Entering AP mode (GPS acquired)

Normal operation with GPS lock (all solid)

Loss of GPS (rapid flash for 2 seconds, then once every second)

Stability Mode

Entering Stability mode (GPS acquired)

Normal operation with GPS lock (all solid)

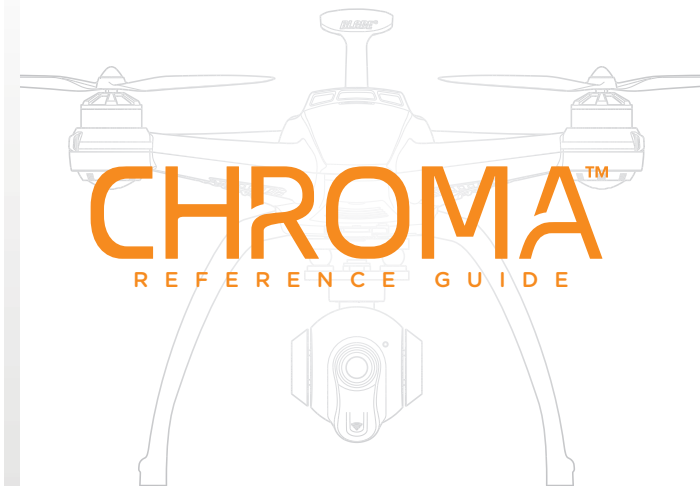Loss of GPS (rapid flash for 2 seconds, then once every second)

Agility Mode

Entering Agility mode (GPS acquired)

Normal operation with GPS lock (all solid)

Loss of GPS (rapid flash for 2 seconds, then once every second)

GPS Off

Smart, AP and Return to Home Modes — All solid white

Stability and Agility Modes — Solid white front, rear flashes active flight mode color

BLADE

CHROMA™
REFERENCE GUIDE

Compass Calibration Procedure*

- Power the transmitter and Chroma™ quadcopter on and face the aircraft pointing North.
- Cycle the top left transmitter switch completely 4 times as shown at the right.
- The quadcopter indicates it has entered *compass calibration mode* by flashing the LEDs orange.
- The LEDs will indicate which direction to orient the quadcopter for each rotation by lighting either one or two motor pods orange. Turn the quadcopter to point the orange LEDs North, then rotate the quadcopter 360° as shown by the blue arrows below. Complete all 4 rotations of the Chroma quadcopter as shown in the illustration below within 30 seconds.
- After the last rotation step, hold the quad level, facing North and check the LEDs.
 Green = Ready
  Red = Repeat Compass Calibration

4X

North

a b c d
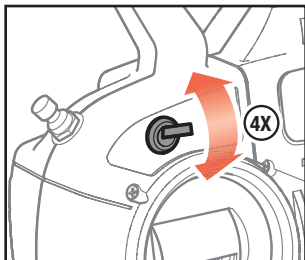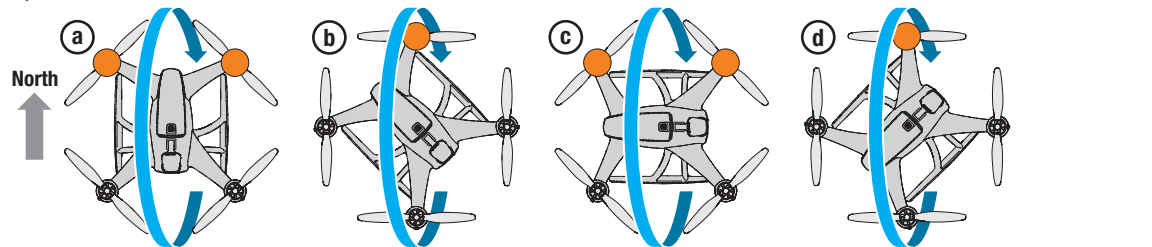
Accelerometer Calibration Procedure*

- Power on the transmitter and Chroma quadcopter.
- Place the quadcopter on a flat, level surface.
- While holding the bind switch on the transmitter, cycle the top left switch 4 times as shown at the right.
- The Chroma quadcopter will emit a series of slow tones followed by a series of rapid tones, indicating the calibration has started.
- Do not move the quadcopter while it performs the accelerometer calibration procedure.
- When the procedure has completed, the quadcopter will emit a "happy" tone and the LED will display green indicating the calibration was successful. If it emits a "sad" tone and the LED displays solid red, repeat the calibration procedure.

See the online videos at *www.KnowChroma.com* for complete calibration procedures.

4X
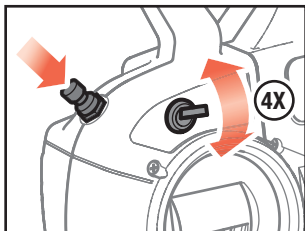
* For information on calibrating the Chroma quadcopter with the ST-10+ Ground Station transmitter, see the online video at *www.KnowChroma.com.*

Binding

For instructions on binding with GPS disabled, refer to the online video at *www.KnowChroma.com*.

Binding the Chroma Quadcopter To Your Transmitter
1. With the transmitter and quadcopter powered OFF, connect the battery to the quadcopter.
2. Place the quadcopter on a flat level surface.
3. Power the quadcopter ON and let it initialize. The status LEDs will remain off.
4. Hold the quadcopter upside down until the status LEDs flash blue, indicating it has entered bind mode.
5. Set the quadcopter back upright.
6. On your transmitter, ensure the throttle is in the low position and the throttle trim is at neutral.
7. Power ON your transmitter in bind mode according to the instructions included with your transmitter.
8. When the binding process is successful, the quadcopter will emit a quick, 3-beep tone and the LEDs will indicate which flight mode is selected. If the LEDs are flashing red, the quadcopter is in Return Home mode. Switch to Smart or AP Mode before attempting to start the motors.
9. Place the quadcopter outdoors in the desired starting position in preparation for flight.

Troubleshooting Quick Reference

Problem	Solution
Motors won't start	Ensure GPS antenna has clear view of sky and GPS lock has been acquired
	Check for compass error indication
	Review start up procedure in manual
Blinking yellow led 'compass error' indication	Move model away from large metal objects or surfaces
	Calibrate compass (*see calibration reference*)
Steady beeping, motors won't start	Calibrate the DX4 transmitter
	Center throttle trim (BNF version)
Won't hold position in hover	Check GPS antenna mast is extended
	Calibrate compass (*see calibration guide*)
	Calibrate accelerometers (*see calibration guide*)

For a complete description of the function, capabilities and maintenance of the Chroma quadcopter, refer to the online videos at *www.KnowChroma.com*.